

EVIDENCES OF LIFE IN THE NEWLY-DELIVERED CHILD.

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My opinion having recently been asked as to the fact of a child having life at delivery, in a case involving a large estate, I have been led to investigate the subject, and collate the views and opinions of authorities on this delicate and important point.

First. What are the indications of life?

Before delivery the foetus possesses circulation without respiration. While this continues, and while the heart maintains its action, the foetus lives and carries on all the functions of embryonic life. The cessation of the heart's action, and consequently of the circulation of the blood, marks the death of the child, and decomposition soon commences.

So long as pulsation continues in the cord, the foetus, though inaccessible to the touch, is regarded as possessing life. This belief is so well established that all obstetricians hesitate in the performance of certain operations which may be rendered necessary by malformation of the pelvis, or malposition of the

child, when said operation must necessarily lead to the destruction of life in the child. Indeed, the Roman Catholic Church provides for the baptism of the undelivered child under such circumstances, and does not hesitate to pronounce such an infant as saved if the ceremony is performed while such pulsations are known to exist, however feebly they may occur.

Now, if the foetus is living as long as pulsation exists, may we not equally claim it as alive if such pulsation exists after delivery, even though respiration has not been established, or even attempted.

Upon this point obstetrical authors maintain a remarkable silence. In works on Medical Jurisprudence we find more light thrown upon this intricate and important matter. Beck says: "There are two ways in which a child may be born. When born, the cord may be pulsating, *showing that it is alive*, and yet it may not respire. In this state it may continue for a sufficient length

of time to die from natural causes, or in consequence of criminal interference, before respiration has commenced."—*Beck's Med. Juris.*, eleventh ed., 1860, vol. I., p. 494.

Taylor tells us: "It was formerly supposed that if the lungs contained no air the child could not have respired, and it must have been born dead. But neither of these views is correct; children have been known to respire faintly, and continue in existence many hours without visibly distending the cells of the lungs with air; the absence of air from the lungs, therefore, furnishes no proof either that respiration has not been performed, or that the child has not lived. (G. H. Rep., April, 1842.) That our law authorities will admit evidence of life in a child before the establishment of respiration, is clear from the decision of Judge Parker in the case of *Rex vs. Brain*, in which he said that a child might be born alive and not breathe for some time after its birth (*Archbold Crim. Plead.*, 377), as also from the charge of Mr. Justice Coltman, in the case of *Rex vs. Sellis* (*Norfolk Spr. Crim.*, 1837). In this instance it was alleged that the prisoner had murdered her child by cutting off its head. The judge told the jury that if the child was alive at the time of the act, it was not necessary, in order to constitute murder, that it should have breathed. In fact, it would appear that respiration is regarded as only one proof of life, and the law will, therefore, receive any other kind of evidence which may satisfactorily show that the child has lived."

—*Taylor's Med. Juris.*, p. 324.

Cases are also on record going to show that the law would regard it as willful murder, if respiration were prevented.

On further research it would appear that the civil rights appertain to a child born, though it has not yet breathed.

Taylor again tells us (p. 428): "The pulsation of a child's heart, or even the spasmodic twitching of the muscles of its body, is regarded as a satisfactory proof of live birth. The latter sign has been judicially so pro-

nounced, *a fortiori*, therefore, the motion of a limb will be considered good evidence, in an English Court of Law, of life after birth."

Provided these manifestations of the presence of life are undoubted the time during which they continue is not material.*

Taylor mentions a case (*Fish vs. Palmer*), tried in the English Court of Exchequer in 1806, where the plaintiff's wife, possessed in her own right of landed estate, died after delivery of a child, supposed at the time to have been born dead. The estate was claimed by Palmer, her heir-at-law, and surrendered by Fish in consequence of his not having a living child by his marriage. Subsequent information led to the belief that the child was born alive. In the action which was brought to recover the estate, Fish produced evidence to show that the physician who attended his wife (since deceased) had declared that the child was living an hour before it was born, and when it was born he had it immediately placed in a warm bath by the nurse. It did not manifest any signs of active existence, yet the two women who attended it swore that there appeared twice a twitching and tremulous motion of the lips. It did not exhibit any further signs of existence.

The question next arose, whether this was sufficient evidence of the child having been born alive?

The medical men differed. Two gave it as their opinion that had the vital principle been extinct there could have been no muscular action in any part of the body, therefore it had been born alive, or manifested life after its entire birth. One demurred, and attributed this motion of the lips to the remains of intra-uterine life.

The jury, under the charge of the Court, pronounced the child to have been born alive, and the plaintiff recovered his estate.

*"A child which survives entire birth for a single instant, acquires the same civil rights as if it had continued to live for a month longer." *Taylor, op. cit.*

All physiologists would readily acknowledge that such movements could not occur in a body devoid of life; that they must be due to the presence of some vital power.

Casper's Forensic Medicine really throws no light upon the subject. He quotes the General Common Law, part i, Tit. 12, § 13. The *live birth* of a child is to be held proven, when it has been heard to cry by witnesses of unimpeachable veracity, present at its birth. This is all. The subject is not again alluded to.

In the last edition of *Wharton and Stillé*, vol. ii, p. 100, we find the following: "It is important to bear in mind that there may be *life without respiration*. The circulation may go on, and the child may make various muscular movements, after it is separated from the mother, without respiring; sometimes, owing to congenital feebleness, or to its being in an asphyxiated condition, it makes no effort to breathe; and again, all its efforts may be fruitless, from the obstruction of the fauces and larynx with viscid mucus. Hence, paradoxical as it may seem, a child may live and die without having breathed. . . . The attempt too strictly to define the essential conditions of life has led to some absurd conclusions. In Germany, a distinct vocal sound is required by law as the evidence of life. But this appears to be modified in practice by the substitution of breathing for vocal sound, and the doctrine is accepted that respiration and life are reciprocally evidences of one another." Hence, intra-uterine life is not life. This

view is not tenable, ; for we consider the many instances of suspended respiration for a longer or shorter period, as in attacks of trance, or, what is of more frequent occurrence, of syncope.

There must be life, so long as even the feeblest circulation continues. In fact, this is demonstrated by the test by which to determine in cases of apparent death whether life is utterly extinct; a ligature placed around the end of a finger, by impeding the return of the venous blood, at once shows that circulation still continues in the capillaries, and hence that life has not entirely departed.

In the work just quoted instances are given to show the importance of this matter. In these cases, because of the presence of pulsation, even after the lapse of several hours, efforts at resuscitation were made and crowned with success.

Wharton and Stillé (op. cit., p. 117) give, as one chief point that has been demonstrated, "that life for a brief period is compatible with absence of respiration."

In conclusion, with such an array of facts and opinions, we would most earnestly caution the profession against the careless habit which so frequently obtains, of reporting a child as *still-born*, merely because it lived but a short time after delivery.

We are firmly of the opinion that a large number, perhaps even a majority, of those reported among the still-births were living, even breathing, for an appreciable interval after their complete separation from the mother.

NOTE.—The last edition of "Taylor's Medical Jurisprudence," issued since the above was in type, gives, p. 624, *et seq.*, additional cases of equal value.

